

April 12th.

DR. BRIDGES, Vice-President, in the Chair.

Twenty-two members present.

The following were presented for publication :

“Descriptions of six new species of Unionidæ from Lake Nyassa, Central Africa;” “Descriptions of six new species of Succinea,” and “Descriptions of thirteen new species of Melanidæ.” By Isaac Lea.

“A Critical Review of the Procellaridæ, Pt. II.” By E. Coues, M. D.

The death was announced of Samuel Ashmead and William J. Taylor, late members of the Academy.

April 19th.

DR. BRIDGES, Vice-President, in the Chair.

Eighteen members present.

The following were presented for publication :

“Description of a new species of Planorbis;” “Descriptions of five new species of Lymnæa;” “Description of two new species of Unionidæ from South Africa,” and “Descriptions of twenty-four new species of Physa.” By Isaac Lea.

“Notes of an examination of the Birds of the Group Cœrebrinæ,” etc. By John Cassin.

April 25th.

DR. BRIDGES, Vice-President, in the Chair.

Nineteen members present.

The following, on favorable report of the respective committees, were ordered to be published:—

**Synonymy of the Species of STREPOMATIDÆ, a Family of Fluvial Mollusca inhabiting North America.**

Part 3.

BY GEORGE W. TRYON, JR.

Genus SCHIZOSTOMA, Lea.

*Schizostoma*, Lea, Philos. Proc. ii. p. 242, Dec. 1842, iv. p. 167, Aug. 1845. Philos. Trans. x. p. 67, 1847. Obs. iv. p. 41, 1847. Proc. Acad. Nat. Sci., May, 1860. Jour. Acad. Nat. Sci. v. pt. 3, p. 245, Mar., 1863. Obs. ix. p. 67.

*Schizocheilus*, Lea, Philos. Trans. x. p. 295, 1853. Obs. v. p. 51, 1853.

*Gyrotoma*, Shuttleworth, Mittheil. Naturforsch. Bern. p. 88, July 22, 1845. Adams, Genera, i. p. 305, Feb., 1854. Gray, Guide to Mollusca, i. p. 103, 1857. Chenu, Man. de Conchyl. i. p. 293, 1859. Anthony, Proc. Acad. Nat. Sci., p. 63, Feb., 1860. Binney, Check List, June, 1860. Brot, List, p. 27, 1862.

[April,

*Melatoma*, Anthony, Gray, Zool. Proc., p. 153, 1847. Woodward, Manual, p. 131, 1851. Reeve, Conch. Icon., Mar., 1860.  
*Apella*, Mighels, MSS.

## SYNOPTICAL TABLE OF SPECIES.\*

*Fissure direct, narrow, and deep.*

*Fissure oblique, short, and wide.*

## 1. Shell striate or ridged.

a. *Shell conical, spire lengthened, sharply carinate.*

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| 1. <i>S. Cariniferum</i> , Anthony. | 15. <i>S. pagodum</i> , Lea.       |
| <i>S. Showalterii</i> , Lea.        | 16. <i>S. pyramidatum</i> , Shutt. |
| 2. <i>S. castaneum</i> , Lea.       | 17. <i>S. Wetumpkense</i> , Lea.   |
|                                     | <i>S. ornata</i> , Anth.           |
|                                     | <i>S. pagoda</i> , Lea, of Reeve.  |

b. *Shell conic-cylindrical; spire obtuse, not carinate.*

- |                                       |                                  |
|---------------------------------------|----------------------------------|
| 3. <i>S. ovoideum</i> , Shuttleworth. | 18. <i>S. Alabamense</i> , Lea.  |
|                                       | 19. <i>S. Anthonyi</i> , Lea.    |
| 4. <i>S. excisum</i> , Lea.           | 20. <i>S. babilonicum</i> , Lea. |
|                                       | <i>Spillmanii</i> , Lea.         |

c. *Shell globosely-ovate, spire moderate.*

- |                                     |                                    |
|-------------------------------------|------------------------------------|
| 5. <i>S. pumilum</i> , Lea.         | 21. <i>S. Buddii</i> , Lea.        |
| <i>Globosum</i> , Lea.              | <i>S. funiculatum</i> , Lea.       |
| <i>Alabamense</i> , Lea, of Reeve.  | <i>S. pagodum</i> , Lea, of Reeve. |
| <i>Showalterii</i> , Lea, of Reeve. |                                    |

## 2. Shell smooth.

d. *Shell elliptic.*

6. *S. ellipticum*, Anthony.  
 7. *S. laciniatum*, Lea.

e. *Shell quadrately cylindrical.*

- |                                       |                                     |
|---------------------------------------|-------------------------------------|
| 8. <i>S. amplum</i> , Anthony.        | 22. <i>S. demissum</i> , Anth.      |
| 9. <i>S. nuculum</i> , Anthony.       | <i>S. Hartmanii</i> , Lea.          |
|                                       | 23. <i>S. constrictum</i> , Lea.    |
|                                       | <i>S. rectum</i> , Anth.            |
| 10. <i>S. cylindraceum</i> , Mighels. | 24. <i>S. salebrosum</i> , Anth.    |
|                                       | <i>S. robustum</i> , Anth.          |
|                                       | <i>S. rectum</i> , Anth., of Reeve. |

f. *Shell ovate, whorls obliquely flattened, spire obtuse.*

- |                                   |                                |
|-----------------------------------|--------------------------------|
| 11. <i>S. bulbosum</i> , Anthony. | 25. <i>S. glandulum</i> , Lea. |
| <i>S. ovalis</i> , Anthony.       | 26. <i>S. incisum</i> , Lea.   |
| 12. <i>S. curtum</i> , Mighels. † | <i>S. virens</i> , Lea.        |
|                                   | <i>S. quadratum</i> , Anthony. |
|                                   | <i>S. obliquum</i> , Anthony.  |

13. *S. glans*, Lea.

g. *Shell globose.*

14. *S. sphericum*, Anthony.

## SPECIES.

1. *S. cariniferum*, Anthony.

\*The *Schizostomæ* contain two nearly equal groups, characterized respectively by a narrow direct, and an oblique, short, wide slit.

In the above table the opposite species in the two groups are generally exactly similar except in the character of the slit!

†Synonym of *bulbosum*?

- Gyrotoma carinifera*, Anthony, Proc. Acad. Nat. Sci., p. 66, Feb., 1860.  
Binney, Check List, No. 310. Brot, List, p. 27.
- Melatoma cariniferum*, Anthony, Reeve, Monog. Melatoma, t. 2, f. 13.
- Schizostoma Showalterii*,\* Lea, Proc. Acad. Nat. Sci., p. 93, Mar., 1860. Jour. Acad. Nat. Sci., t. 35, f. 49, Mar., 1863. Obs. ix. p. 68.
- Gyrotoma Showalterii*, Lea, Binney, Check List, No. 334. Brot, List, p. 28.
2. *S. castaneum*, Lea.  
*Schizostoma castaneum*, Lea, Proc. Acad. Nat. Sci., p. 186, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 50. Obs. ix. p. 69.  
*Gyrotoma castanca*, Lea, Binney, Check List, No. 311. Brot, List, p. 27.
3. *S. ovoideum*, Shuttleworth.  
*Gyrotoma ovoideum*, Shuttleworth, Mittheil., Bern. Nat. Gesell., No. 50, p. 88, July 22, 1845. H. & A. Adams, Genera, iii. t. 32, f. 4.
4. *S. excisum*, Lea.†  
*Melania excisa*, Lea, Philos. Proc., p. 242, Dec., 1842. Philos. Trans. ix. 1846. Jay, Cat., 4th edit., p. 273.  
*Schizostoma excisa*, Lea, Wheatley, Cat. Shells U. S. p. 28.  
*Gyrotoma excisa*, Lea, Binney, Check List, No. 317. Brot, List, p. 27.  
*Melatoma excisum*, Lea, Reeve, Monog. sp. 2.
5. *S. pumilum*, Lea.  
*Schizostoma pumilum*, Lea, Proc. Acad. Nat. Sci., p. 187, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 57, Mar., 1863. Obs. ix. p. 74.  
*Gyrotoma pumila*, Lea, Binney, Check List, No. 328. Brot, List, p. 27.  
*Schizostoma globosum*,‡ Lea, Proc. Acad. Nat. Sci., p. 187, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 58, Mar., 1863. Obs. ix. p. 74.  
*Gyrotoma globosa*, Lea, Binney, Check List, No. 321. Brot, List, p. 27.  
*Melatoma globosum*, Lea, Reeve, Monog. t. 3, f. 18.  
*Melatoma Alabamense*, Lea, of Reeve, Monog. sp. 20.  
*Melatoma Showalterii*, Lea, of Reeve, Monog. sp. 23?
6. *S. ellipticum*, Lea.§  
*Melatoma ellipticum*, Anthony, MSS. Reeve, Monog., t. 3, f. 21, Apr. 1861.  
*Gyrotoma elliptica*, Anthony, Brot, List, p. 27.
7. *S. laciniatum*, Lea.  
*Schizostoma laciniatum*, Lea, Philos. Proc. iv. p. 167, Aug., 1845. Philos. Trans. x. p. 69, t. 9, f. 57, 1853.  
*Gyrotoma laciniata*, Lea, Binney, Check List, No. 324. Brot, List, p. 27.
8. *S. amplum*, Anthony.  
*Gyrotoma ampla*, Anthony, Proc. Acad. Nat. Sci., p. 66, Feb., 1860. Binney, Check List, No. 306. Brot, List, p. 27.  
*Melatoma amplum*, Anthony, Reeve, Monog. t. 3, sp. 16.
9. *S. nucleum*, Anthony.  
*Melatoma nuclea*, Anthony, MSS. Reeve, Monog. t. 3, f. 19, Apr., 1861.  
*Gyrotoma nuclea*, Anthony, Brot, List, p. 27.
10. *S. cylindraceum*,|| Mighels.  
*Schizostoma cylindracea*, Mighels, Bost. Proc. i. p. 189, Oct., 1844.

\* Mr. Reeve's figure 23 of *Melatoma Showalterii* does not represent this species, but *S. pumilum*, Lea.

† Mr. Reeve and Dr. Brot, place *ovoidesum*, Shutt., in the synonymy of this species. As I have no means of comparing specimens of the latter with Mr. Lea's species, I have preferred to separate them at present. *S. Babytonicum* is a larger, wider, more robust species.

‡ The young of *pumilum*.

§ Distinguished from *bulbosum*, Anth., by its more lengthened form, and by the regularly convex outline of the body whorl and spire.

|| I have not seen this species.

- Gyrotoma cylindracea*, Müll.,\* Binney, Check List, No. 315.  
*Gyrotoma cylindracea*, Gould, Brot, List, p. 27.
11. *S. bulbosum*, † Anthony.  
*Gyrotoma bulbosa*, Anthony, Proc. Acad. Nat. Sci., p. 65, Feb., 1860. Binney, Check List, No. 309. Brot, List, p. 27.  
*Melatoma bulbosum*, Anthony, Reeve, Monog. sp. 22.  
*Gyrotoma ovalis*, Anthony, Proc. Acad. Nat. Sci., p. 65, Feb., 1860. Binney, Check List, No. 325. Brot, List, p. 27.
12. *S. curtum*, ‡ Mighels.  
*Schizostoma curta*, Mighels, Bost. Proc. i. p. 189, Oct., 1844.  
*Gyrotoma curta*, Mighels, Binney, Check List, No. 314.  
*Gyrotoma curta*, Gould, Brot, List, p. 27.
13. *S. glans*, § Lea.  
*Schizostoma glans*, Lea, Proc. Acad. Nat. Sci., p. 186, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 52, Mar., 1863. Obs. ix. p. 70.  
*Gyrotoma glans*, Lea, Binney, Check List, No. 320. Brot, List, p. 27.
14. *S. sphaericum*, Anthony.  
*Melatoma sphaericum*, Anthony, MSS., Reeve, Monog. sp. 8, Apr., 1861.
15. *S. pagoda*, || Lea.  
*Schizostoma pagoda*, Lea, Philos. Proc. iv. p. 167, Aug., 1845. Philos. Trans., x. p. 67, t. 9, f. 52, 1853.  
*Gyrotoma pagoda*, Lea, Chenu, Manuel, i. f. 2020. Binney, Check List, No. 327. Brot, List, p. 27.
16. *S. pyramidatum*, ¶ Shuttlesworth.  
*Gyrotoma pyramidatum*, Shuttlesworth, Mitt. Bern. Nat. Gesell., No. 50, p. 88, July 22, 1845. Binney, Check List, No. 329. Brot, List, p. 27.
17. *S. Wetumpkaense*, Lea.  
*Schizostoma Wetumpkaense*, Lea, Proc. Acad. Nat. Sci., p. 187, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 56, Mar., 1863. Obs. ix. p. 73.  
*Gyrotoma Wetumpkaensis*, Lea, Binney, Check List, No. 336. Brot, List, p. 28.  
*Melatoma Wetumpkaense*, Lea, Reeve, Monog. t. 3, f. 17.  
*Melatoma ornata*,\*\* Anthony, MSS., Reeve, Monog. fig. 11.  
*Melatoma pagoda*, Lea, Reeve, Monog. fig. 1, a. (not 1 b).
18. *S. Alabamense*, †† Lea.  
*Schizostoma Alabamense*, Lea, Proc. Acad. Nat. Sci., p. 187, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 54. Obs. ix. p. 72.  
*Gyrotoma Alabamensis*, Lea, Binney, Check List, No. 305. Brot, List, No. 27.
19. *S. Anthonyi*, Reeve.

\* Typographical error.

† Having examined many specimens of *bulbosum* and *ovalis*, I find no difference of specific weight.

‡ I have not seen this species.

§ More inflated, heavier, much lighter in color, not so strongly striated, and with narrower bands than *S. globosum*, Anth. In a very fine specimen before me, the body whorl is disposed to be tuberculate below the suture.

|| Mr. Reeve figures two distinct species for this shell; his fig. 1 a. is *S. Wetumpkaense*, Lea, and fig. 1 b. is *S. Buddii*, Lea.

¶ I have seen no authentic specimens of this species.

\*\* Never published by Mr. Anthony, who sent a specimen with label attached, marked "Proc. A. N. S.," to Mr. Reeve. Mr. Reeve, misled by this reference, refers in his description to *Anc. ornata*, Anthony, and consequently assigns North Carolina as the habitat. No species of *Schizostoma* is known to exist out of Coosa River, Alabama. *S. ornata* is the young of *Wetumpkaense*.

†† Mr. Reeve's figure 20, intended for this species, I refer to *S. babylonicum*, Lea. *Alabamense* is distinguished from *babylonicum* by the regularity of its striae.

- Melatoma Anthonyi*, Reeve, Monog. sp. 12, Apr., 1861.  
*Gyrotoma Anthonyi*, Reeve, Brot, List, p. 27.
20. *S. babylonicum*, Lea.  
*Schizostoma babylonicum*, Lea, Philos. Proc., iv. p. 167, Aug., 1845. Philos. Trans. x. p. 68, t. 9, f. 54.  
*Gyrotoma babylonicum*, Lea, Binney, Check List, No. 307. Chenu, Manuel de Conchyl. i. f. 2021. Brot, List, p. 27.  
? *Melatoma babylonicum*, Lea, Reeve, Monog. sp. 6.  
*Schizostoma Spillmanii*, Lea, Proc. Acad. Nat. Sci., p. 54, Feb., 1861. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 55. Obs. ix. p. 72.
21. *S. Buddii*, Lea.\*  
*Schizostoma Buddii*, Lea, Philos. Proc. iv. p. 167, Aug., 1845. Philos. Trans. x. p. 68, t. 9, f. 53.  
*Gyrotoma Buddii*, Lea, Binney, Check List, No. 308. Brot, List, p. 27.  
*Schizostoma funiculatum*, Lea, Philos. Proc., iv. p. 167, Aug., 1845. Philos. Trans. x. p. 69, t. 9, f. 56.  
*Gyrotoma funiculata*, Lea, Binney, Check List, No. 318. Brot, List, p. 27.  
*Melatoma funiculatum*,† Lea, of Reeve, Monog., sp. 5.  
*Melatoma pagoda*, Lea, of Reeve, Monog., sp. 1, b.
22. *S. demissum*,‡ Anthony.  
*Gyrotoma demissa*, Anthony, Proc. Acad. Nat. Sci., p. 64, Feb., 1860. Binney, Check List, No. 316. Brot, List, p. 27.  
*Melatoma demissum*, Anthony, Reeve, Monog., sp. 9.  
*Schizostoma Hartmanii*, Lea, Proc. Acad. Nat. Sci., p. 187, May, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 51. Obs. ix. p. 69.  
*Gyrotoma Hartmanii*, Lea, Binney, Check List, No. 322. Brot, List, p. 27.
23. *S. constrictum*,§ Lea.  
*Schizostoma constrictum*, Lea, Philos. Proc., iv. p. 167, Aug., 1845. Philos. Trans., x. p. 68, t. 9, f. 55.  
*Gyrotoma constricta*, Lea, Binney, Check List, No. 302. Brot, List, p. 27.  
*Gyrotomu recta*, Anthony, Proc. Acad. Nat. Sci., p. 64, Feb. 1860. Binney, Check List, No. 331. Brot, List, p. 27.  
*Melatoma rectum*, Anthony, Reeve, Monog. sp. 10, not sp. 7, a.
24. *S. salebrosum*,|| Anthony.  
*Gyrotoma salebrosa*, Anthony, Proc. Acad. Nat. Sci., p. 66, Feb., 1860. Binney, Check List, No. 333.  
*Melatoma salebrosum*, Anthony, Reeve, Monog. sp. 8 and 15.  
*Gyrotoma robusta*, Anthony, Proc. Acad. Nat. Sci., p. 67, Feb., 1860. Binney, Check List, No. 332. Brot, List, p. 28.  
*Melatoma robustum*, Anthony, Reeve, Monog. sp. 14, a, b.  
*Melutoma rectum*, Anthony, of Reeve, Monog. sp. 7, a.
25. *S. glandula*,¶ Lea.  
*Schizostoma glandula*, Lea, Proc. Acad. Nat. Sci., p. 187, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 53, Mar., 1863. Obs. ix. p. 71.  
*Gyrotomu glandula*, Lea, Binney, Check List, No. 319. Brot, List, p. 27.

\* Mr. Reeve's figure (3) of this species is a *Goniobasis lata*, Jay.

† This figure does not so well represent *funiculatum* as fig. 1, b, intended for *S. pagoda*.

‡ Mr. Lea, (Jour. Acad. Nat. Sci., v. pt. 3), makes this species to equal his *S. constrictum*. I do not consider them the same; *constrictum* is longer and narrower.

§ Mr. Reeve's figure 7, a, represents rather a smooth variety of *salebrosum*, Anth.

|| In a large number of specimens before me, the distinctive features of *salebrosum* and *robustum* become so completely and insensibly merged together that I cannot separate them, and believe them to be identical.

¶ Closely allied to *S. incisum*, but may be distinguished by being heavier, of different color, higher spire, and more convex outline.

26. *S. incisum*,\* Lea.

*Anculosa* (*Schizostoma*) *incisa*, Lea, Philos. Proc., ii. p. 243, Dec., 1842. Philos. Trans. ix. p. —.

*Schizostoma incisa*, Lea, Wheatley, Cat. Shells, U. S. p. 28. Hanley, Conch. Misc. Melania, t. 5, f. 44, 45.

*Gyrotoma incisa*, Lea, Binney, Check List, No. 323. Brot, List, p. 27.

*Melotoma incisa*, Lea, Reeve, Monog. sp. 4.

*Melania incisa*, Lea, Jay, Cat., 4th Edit., p. 274.

*Leptoxis incisa*, Lea, Binney, Check List, No. 363. Haldeman, Monog. p. 2, t. 1, f. 24—26.

*Gyrotoma quadrata*, Anthony, Proc. Acad. Nat. Sci., p. 65, Feb., 1860. Binney, Check List, No. 330.

*Melotoma quadratum*, Anthony, Reeve, Monog. fig. 7, b, (not 7 a, or 8).

*Schizostoma virens*, Lea, Proc. Acad. Nat. Sci., p. 187, 1860. Jour. Acad. Nat. Sci., v. pt. 3, t. 35, f. 59. Obs. ix. p. 75.

*Gyrotoma virens*, Lea, Binney, Check List, No. 335. Brot, List, p. 28.

*Gyrotoma obliqua*, Anthony, MSS.

*Species unknown to me.*

*Gyrotoma conica*, Shuttleworth, (ubi) Brot, List, p. 27.

## 3d Section: aperture entire and rounded below.

## Genus ANCULOSA, Say.

*Anculosa*, Say, Jour. Acad. Nat. Sci., ii. p. 178, Nov. 1821. Conrad, Am. Jour. Sci. xxv. p. 342, 1834. Muller, Syn. Test. Viv. p. 39, 1836. Swainson, Manual Malacol. 1840. Haldeman, Suppl. to Monog. Limniades, Oct. 1840. Sowerby, Conch. Manual, Edit. 2, p. 66, 1842. Wheatley, Cat. Shells U. S. p. 27, 1845. Lea, Philos. Trans. ix. p. 14, 1846. Anthony, Proc. Acad. Nat. Sci. p. 67, Feb. 1860.

*Anculosa*, Conrad, Hermannson Indices Gener. Malac. i. p. 51, 1846.

*Anculotus*, Say, Jour. Acad. Nat. Sci., v. pt. 1, p. 128, Aug. 1825. Conrad, New Fresh Water Shells, p. 62, 1834. Couthuoy, Bost. Jour. ii. p. 184, Feb. 1839. Anthony, Bost. Jour., iii. p. 278, Jan. 1840. DeKay, Moll. N. York, p. 101, 1843. Chenu, Bibl. Conch. i. iii. Conrad, p. 26, 1845. Gray, Genera, Zool. Proc. xv. p. 153, 1847. Woodward, Manual, i. p. 131, 1851. Jay, Cat. 4th Edit., p. 276, 1852. Reeve, Conch. Iconica, Sept. 1860.

*Ancylotus*, Say, Hermannson, Indices. Gen. Mal. i. p. 51, 1846.

??*Leptoxis*, Rafinesque, Journ. de Phys. lxxxviii. p. 424, 1819. Haldeman, Monog. Lept. H. & A. Adams, Genera, i. p. 307, Feb. 1854. Chenu, Man. de Conchyl. i. p. 294, 1859. Binney, Check List, p. 10, June, 1860. Brot, List, p. 23, 1862.

*Mudalia*, Haldeman, Suppl. to Monog. Limn., Oct. 1840.

*Nitocris*, H. & A. Adams, Genera, i. p. 308, Feb. 1854.

1. *Nodulous species.*1. *A. Anthonyi*, Budd.

*Anculosa Anthonyi*, Budd, Redfield, Ann. Lyc. N. Hist., vi. p. 130, t. 1, f. 6, Apr., 1854.

*Leptoxis Anthonyi*, (Budd) Redfield, Brot, List, p. 23. Binney, Check List, No. 341.

*Anculotus Anthonyi*, (Budd) Redfield, Reeve, Monog. Anc. t. 2, f. 17.

2. *A. plicata*, Conrad.

*Anculotus plicatus*, Conrad, New Fresh water Shells, p. 61, t. 8, f. 18, 1834.

\* Mr. Lea, (Obs. ix. p. 67), considers *quadratum*, Anth. to be a synonym of his *S. incisum*, in which decision I entirely agree with him. To these I unite *S. virens*, Lea, which I find to be the young shell of the same species.

- DeKay, Moll. N. York, p. 103. Jay, Catalogue, 4th Edit., p. 276. Reeve, Monog. t. 3, f. 22.
- Anculosa plicata*, Conrad, Wheatley, Cat. Shells U. S., p. 28.
- Leptoxis plicata*, Conrad, Binney, Check List, No. 379. Haldeman, Monog. Lept., p. 3, t. 2, f. 35—39.
- Anculosa bella*, Lea, Philos. Proc., ii. p. 83, Oct., 1841. Wheatley, Cat. Shells U. S., p. 28.
- Anculosa tuberculata*, Lea, Philos. Proc., ii. p. 83, Oct., 1841. Phil. Trans., ix. p. 21. Obs., iv. p. 21. Wheatley, Cat. Shells U. S., p. 28. Binney, Check List, No. 392.
- Anculotus Smaragdinus*, Reeve, Monog. t. 3, f. 23, Apr., 1860.
2. *Sulcate species.*
3. *A. Showalterii*, Lea.  
*Anculosa Showalterii*, Lea, Proc. Acad. Nat. Sci., p. 93, 1860. Jour. Acad. Nat. Sci., 2d Ser., v. pt. 3, p. 255, t. 35, f. 62, Mar., 1863. Obs., ix. p. 77, t. 35, f. 62.
- Leptoxis Showalterii*, Lea, Binney, Check List, No. 385. Brot, List, p. 25.
- Anculotus sulcosus*, Anthony, MSS., Reeve, Monog. Anculotus, t. 6, f. 44, Apr., 1861.
- Leptoxis sulcosa*, Anthony, Brot, List, p. 26.
4. *A. canalifera*, Anthony.  
*Anculosa canalifera*, Anthony, Proc. Acad. Nat. Sci., p. 68, Feb., 1860.
- Anculotus canaliferus*, Anthony, Reeve, Monog. Anculotus, t. 5, f. 39.
- Leptoxis canalifera*, Anthony, Binney, Check List, No. 345. Brot, List, p. 24.
3. *Striate species.*
5. *A. littorina*, Haldeman.  
*Anculosa littorina*, Haldeman, Spec. Number of Monog. Cover of No. 1, Monog., July, 1840.
- Leptoxis littorina*, Haldeman, Monog. Lept., p. 4, t. 4, f. 110. Binney, Check List, No. 368. Brot, List, p. 24.
- Melania pilula*, Lea, Philos. Proc., ii. p. 15, Feb., 1841. Philos. Trans., viii. p. 186, t. 6, f. 50. Obs., iii. p. 24, t. 6, f. 50. DeKay, Moll. N. York, p. 99. Troost, Cat. Moll. Tennessee. Wheatley, Cat. Shells U. S., p. 26. Binney, Check List, No. 204. Catlow, Conch. Nomenc., p. 188.
6. *A. costata*,\* Anthony.  
*Anculotus costatus*, Anthony, Bost. Jour. Nat. Hist., iii. p. 278, t. 3, f. 1, Jan., 1840. DeKay, Moll. N. York, p. 102, t. 7, f. 139. Reeve, Monog. Anculotus, t. 5, f. 41.
- Anculosa costata*, Anthony, List of Shells of Cincinnati, 2d Edit. Wheatley, Cat. Shells U. S., p. 28.
- Leptoxis costata*, Anthony, Binney, Check List, No. 349.
- Melania occidentalis*, Lea, Philos. Proc., ii. p. 12, Feb., 1841. Philos. Trans., viii. p. 172, t. 5, f. 20. Obs., iii. p. 10, t. 5, f. 20. DeKay, Moll. N. Y., p. 95. Wheatley, Cat. Shells U. S., p. 26. Jay, Cat., 4th Edit., p. 274. Binney, Check List, No. 184. Catlow, Conchologist's Nomenc., p. 188.
7. *A. rubiginosa*, Lea.  
*Anculosa rubiginosa*, Lea, ii. p. 83, Oct., 1841. Philos. Trans., ix. p. 20. Obs., iv. p. 20.
- Anculotus rubiginosus*, Lea, Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Ancul., t. 2, f. 12, t. 6, f. 47.

\* *M. occidentalis*, Lea, is the mature form, and *costata* the young, of this species. They are not identical with *trilineata*, Say, as supposed by Prof. Haldeman. The latter species is not found in the upper Ohio, where *costata* abounds.

- Leptoxis rubiginosa*, Lea, Haldeman, Monog. Lept., f. 59 to 70. Binney, Check List, No. 383. Chenu, Manuel, i. f. 2035, 2036.  
*Anculosa Griffithiana*, Lea, Philos. Proc., ii. p. 83, Oct., 1841. Philos. Trans., ix. p. 20. Obs., iv. p. 20. Wheatley, Cat. Shells U. S., p. 28.  
*Anculotus Griffithsonianus*, Lea, Reeve, Monog. Anculotus, t. 1, f. 8.  
*Leptoxis Griffithiana*, Lea, Binney, Check List, No. 362.

4. *Angulated species.*

8. *A. dissimilis*, Say.  
*Paludina dissimilis*, Say, Nicholson's Encyc., 3d Am. Edit., 1819.  
*Anculotus dissimilis*, Say, Ravenel, Cat., p. 11. Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Ancul. t. 4, f. 27.  
*Anculosa dissimilis*, Say, Wheatley, Cat. Shells U. S., p. 28. Haldeman, in Ruppell's Lancaster County, p. 479.  
*Leptoxis dissimilis*, Say, Haldeman, Monog. Lept., p. 4, t. 4, f. 85—100. Brot, List, p. 24. Binney, Check List, No. 355.  
*Helix subcarinata*, Wood, Index, Test. Lister, t. 111, f. 5.  
*Anculotus carinatus*, DeKay, Moll. N. Y., p. 101, 1843. Jay, Cat., 4th Edit., p. 276.  
*Anculosa carinata*, DeKay, Wheatley, Cat. Shells U. S., p. 28.  
*Leptoxis curinata*, DeKay, Binney, Check List, No. 343. Brot, List, p. 24.

*Variety a.*

- Anculosa carinata*, Lea, Proc. Philos., ii. p. 34, Apr., 1841. Philos. Trans., ix. p. 15. Obs. iv. p. 15.  
*Leptoxis carinata*, Lea, Binney, Check List, No. 344.  
*Anculosa, variabilis*, Lea, Philos. Proc. ii. p. 34, Apr. 1841. Philos. Trans. ix. p. 15. Obs. iv. p. 15. Wheatley, Cat. Shells U. S. p. 28.  
*Leptoxis variabilis*, Lea, Chenu, Manuel, i. f. 2037—39. Binney, Check List, No. 394. Brot, List, p. 26. Haldeman, Monog. Leptoxis, p. 4, t. 4, f. 102—9.

*Variety b.*

- Anculotus nigrescens*, Conrad, New Fresh Water Shells, p. 64, t. 8, f. 17, 1834. DeKay, Moll. N. Y., p. 102. Wheatley, Cat. Shells U. S. p. 28. Jay, Cat., 4th Edit. p. 276.  
*Leptoxis nigrescens*, Conrad, Binney, Check List, No. 372.  
*Anculotus trivittatus*, DeKay, Moll. N. Y., p. 102, t. 7, f. 137, 1843.  
*Leptoxis trivittata*, DeKay, Binney, Check List, No. 390.

*Variety c.*

- Anculotus monodontoides*, Conrad, New Fresh-Water Shells, p. 61, t. 8, f. 16, 1834. DeKay, Moll. N. Y., p. 102. Jay, Cat., 4th Edit., p. 276. Wheatley, Cat. Shells U. S., p. 28. Reeve, Monog. Anc. t. 5, f. 37.  
*Mudalia monodontoides*, Conrad, Chenu, Manuel, i. f. 2046—8.  
*Leptoxis monodontoides*, Conrad, Haldeman. Monog. Leptoxis, p. 5, t. 4, 5 f. 124—133. Binney Check List, No. 370.  
*Anculotus dentatus*, Couthuoy, Am. Journ. Sci. xxxvi. p. 390, July, 1839. Bost. Journ. Nat. Hist. ii. p. 185, t. 4, f. 7, Feb. 1839. Reeve, Monog. Anc. t. 5, f. 36. DeKay, Moll. N. Y., p. 102. Jay, Cat., 3d Edit., p. 63.  
*Anculosa dentata*, Couthuoy, Wheatley, Cat. Shells U. S., p. 28.  
*Leptoxis dentata*, Couthuoy, Binney, Check List, No. 352.  
*Anculosa dentata*, Lea, Philos. Proc. ii. p. 34, Apr. 1841.  
*Leptoxis dentata*, Lea, Binney, Check List, No. 353.  
*Anculosa (Mudalia) affinis*, Haldeman, Monog. Limniades, Cover of No. 3, Mar, 13th, 1841.  
*Anculotus affinis*, Haldeman, Reeve, Monog. Anculotus, t. 6, f. 53.  
*Leptoxis affinis*, Haldeman, Binney, Check List, No. 337. Brot, List, p. 23.



9. *A. dilatata*,\* Conrad.

*Melania dilatata*, Conrad, New Fresh-Water Shells, Appendix. p. 6, t. 9, f. 5, 1834.

*Anculotus dilatatus*, Conrad, Reeve, Monog. Anculotus, t. 5, f. 38.

*Anculosa dilatata*, Conrad, Am. Journ. Science, n. s., i. p. 407. Hanley, Conch. Misc. t. 5, f. 38.

*Mudalia dilatata*, Conrad, Chenu, Manuel de Conchyl. i. f. 2043—5.

*Leptoxis dilatata*, Conrad, Haldeman, Monog. Leptoxis, p. 4, t. 4, f. 111—120. Binney, Check List, No. 354. Brot, List, p. 24.

*Melania Rogersii*,† Conrad, New Fresh-Water Shells, Appendix, p. 7, t. 9, f. 7, 1834. Jay, Cat., 4th Edit., p. 274.

*Anculotus Rogersii*, Conrad, Reeve, Monog. Anculotus, t. 4, f. 28.

*Leptoxis Rogersii*, Conrad, Binney, Check List, No. 382.

*Anculotus carinatus*, Anthony, Bost. Journ. Nat. Hist., iii. pt. 3, p. 394, t. 3, f. 5, July, 1840. Reeve, Monog. Anculotus, t. 5, f. 42.

*Leptoxis carinata*, Anthony, Binney, Check List, No. 342.

*Anculotus Kirtlandianus*, Anthony, Bost. Journ. Nat. Hist., iii. pt. 3, p. 295, t. 3, f. 4, July, 1840. Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Anculotus, t. 4, f. 29.

*Anculosa Kirtlandiana*, Haldeman, Wheatley, Cat. Shells U. S., p. 28.

*Melania inflata*, Lea, Philos. Trans. vi. p. 17, t. 23, f. 98. Obs. ii. p. 17. Wheatley, Cat. Shells U. S., p. 25. Binney, Check List, No. 147.

*Leptoxis rapaeformis*, Haldeman, Monog. Leptoxis, p. 4, t. 4, f. 123. Brot, List, p. 25.

10. *A. corpulenta*,‡ Anthony.

*Anculosa corpulenta*, Anthony, Proc. Acad. Nat. Sci. p. 68, Feb. 1860.

*Anculotus corpulentus*, Anthony, Reeve, Monog. Anculotus, t. 1, f. 9.

*Leptoxis corpulenta*, Anthony, Binney, Check List, No. 348. Brot, List, p. 24.

11. *A. melanoides*, Conrad.

*Anculotus melanoides*, Conrad, New Fresh-Water Shells, p. 64, t. 8, f. 19, 1834. DeKay, Moll. N. Y., p. 102. Wheatley, Cat. Shells U. S., p. 26, Reeve, Monog. Anculotus, t. 6, f. 48.

*Leptoxis melanoides*, Conrad, Haldeman, Monog. Leptoxis, p. 5, t. 5, f. 145, 146. Binney, Check List, No. 369.

*Anculosa (Mudalia) turgida*, Haldeman, Sup'ement to No. 1, Monog. Limniades, Oct. 1840. Wheatley, Cat. Shells U. S., p. 28.

*Leptoxis turgida*, Haldeman, Monog. Leptoxis, p. 5, t. 5, f. 151. Binney, Check List, No. 393. Brot, List, p. 26.

5. Shell smooth, globose, or flattened above.

12. *A. trilineata*, Say.

*Melania trilineata*, Say, New Harmony Dissem., No. 18, p. 227, Sept. 9, 1829. Say's Reprint, p. 19, 1840. Binney's Edition, p. 144. Catlow, Conch. Nomencl. p. 189.

*Anculosa trilineata*, Say, DeKay, Moll. N. Y., p. 100. Wheatley, Cat. Shells U. S., p. 27. Jay, Cat. Shells, 3d Edit., p. 62.

*Anculotus trilineatus*, Say, Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Anculotus, t. 5, f. 41, b.

*Leptoxis trilineata*, Say, Haldeman, Monog. Leptoxis, p. 5, t. 5, f. —. Binney, Check List, No. 389. Brot, List, p. 26.

\* I had at first united this to *dissimilis*, and I am yet doubtful whether it is really distinct from that protean species.

† Young of *dilatata*. In placing all these specific names together as synonyms, I am sustained by the decisions of Mr. Lea, (Philos. Trans. viii. p. 171,) Haldeman, Monog. Leptoxis, and Anthony, Proc. Bost. Soc. Nat. Hist. i. p. 5.

‡ Most nearly allied to the heavy, obsoletely angulated form of *dissimilis*.

## Variety.

*Melania viridis*,\* Lea, Philos. Proc. ii. p. 12, Feb. 1841. Philos. Trans., viii. p. 172, t. 5, f. 19. Obs. ii. p. 12. DeKay, Moll. N. Y., p. 95. Wheatley, Cat. Shells U. S., p. 27. Binney, Check List, No. 292. Catlow, Conch. Nomenc. p. 189.

13. *A. subglobosa*, Say.

*Melania subglobosa*, Say, Journ. Acad. Nat. Sci. v. p. 128, Sept. 1825. Binney's edit. p. 116. Binney, Check List, No. 254. Catlow, Conch. Nomenc. p. 188. Jay, Cat. 3d Edit., p. 62.

*Anculotus subglobosus*, Say, Conrad, New Fresh-Water Shells, p. 60, t. 8, f. 14. DeKay, Moll. N. Y., p. 103. Reeve, Monog. Anculotus, t. 1, f. 10. Jay, Cat. 4th Edit., p. 276.

*Anculotus subglobosa*, Say, Wheatley, Cat. Shells U. S., p. 28.

*Leptoxis subglobosa*, Say, Haldeman, Monog. p. 3, t. 2, f. 40—58. Chenu, Manuel de Conchyl. i. f. 2040—42. Binney, Check List, No. 387. Brot, List, p. 25.

*Melania subglobosa*, Lea, Troost, Cat. Shells Tenn., p. 42.

*Anculotus gibbosa*, Philos. Proc. ii. p. 34, Apr. 1841. Philos. Trans. ix. p. 15. Obs. iv. p. 15. Wheatley, Cat. Shells U. S., p. 28.

*Anculotus gibbosus*, Lea, Reeve, Monog. Anculotus, t. 1, f. 3.

*Leptoxis gibbosa*, Lea, Binney, Check List, No. 361. Brot, List, p. 25.

*Melania globula*,† Lea, Philos. Proc. ii. p. 12, Feb. 1841. Philos. Trans. viii. p. 174, t. 5, f. 22. Obs. iii. p. 12. DeKay, Moll. N. Y., p. 95. Troost, Cat. Shells Tennessee. Wheatley, Cat. Shells U. S., p. 25. Binney, Check List, No. 126. Catlow, Conch. Nomenc. p. 187.

## Variety.

*Anculosa tintinnabulum*‡, Lea, Philos. Proc. iv. p. 167, Aug. 1845. Philos. Trans. x. p. 67, t. 9, f. 51. Obs. iv. p. 67.

*Anculotus tintinnabulum*, Lea, Reeve, Monog. Anculotus, t. 2, f. 13. a, b. ?

*Melania virgata*,§ Lea, Philos. Proc. ii. p. 13, Feb. 1841. Philos. Trans. viii. p. 175, t. 5, f. 25. Obs. iii. p. . DeKay, Moll. N. Y., p. 95. Troost, Cat. Shells Tenn. Binney, Check List, No. 290. Catlow, Conch. Nomenc. p. 189. Wheatley, Cat. Shells U. S., p. 27.

14. *A. praerosa*, Say.

*Melania praerosa*, Say, Jour. Acad. Nat. Sci. ii. p. 177, Jan. 1824. Binney's Edit., p. 70. Catlow, Conch. Nomenc. p. 188. Sowerby, Conch. Man. f. 314.

*Anculotus praerosus*, Say, Conrad, New Fresh-Water Shells, p. 59, t. 8, f. 13. Jay, Cat. 4th Edit., p. 276. Reeve, Monog. Anculotus, t. 2, f. 15, 16.

*Anculotus praemorsa*, Say, Woodward, Manuel, t. 8, f. 28.

*Anculosa praerosa*, Say, Ravenel, Cat. p. 11. Wheatley, Cat. Shells U. S., p. 28. Anthony, List, 1st and 2nd Edits. Kirtland, Rep. Zool. Ohio, p. 174. DeKay, Moll. N. Y., p. 103.

\* In treating *viridis* as a synonym of *trilineata*, I agree with the opinions expressed by Messrs. Haldeman, Brot, Binney and Anthony. The two former gentlemen, together with Dr. Jay, consider *costatus*, Anthony, and *occidentalis*, Lea, as synonyms also. In this opinion I cannot coincide. The two species appear to me to be well separated by the costae of Mr. Anthony's species, and the uniformly smooth surface of *trilineatus*. Mr. Reeve's figure of *trilineatus* is very poor; the bands are so represented as to appear like ribs.

† It is by no means certain that *trilineata* is an *Anculosa*. Its general appearance suggests affinities with the *Amnicolidae*, to which family several small species, hitherto considered to be *Anculosa*, have been recently removed. It differs from all the *Amnicolae*, however, in its colored bands.

‡ Mr. Lea's *M. viridis* is the Var. B. of Mr. Say's description of *trilineata*.

§ Juvenile shell.

¶ Distinguished by possessing three brown bands or rows of maculations. It is a beautiful variety.

‡ Young shell of var. *tintinnabulum*.

- Leptoxis prærosa*, Say, Haldeman, Monog. Lept. p. 2, t. 1, f. 1—18. Chenu, Manuel, i. f. 2030—34. Binney, Check List, No. 380. Brot, List, p. 25.
- Melania angulosa*\*, Menke, Syn. Meth., 1st Edit., p. 81, 1828. 2nd Edit. p. 135, 1830. Binney, Check List, No. 15.
- Melania cruentata*, Menke, Syn. Meth., 1st Edit., p. 80, 1828. 2nd Edit. p. 134, 1830.
- Melonia ovularis*, Menke, Syn. Meth., 1st Edit., p. 80. 2nd Edit. p. 134. Binney, Check List, No. 194.
- Melanopsis neritiformis*, Deshayes, Encyc. Meth. Vers. ii. p. 438, No. 14. Anim. Sans. Vert., 2nd Edit., viii. p. 492, 1838.
- Anculotus angulatus*, † Conrad, New Fresh-Water Shells, p. 60, t. 8, f. 15, 1834. DeKay, Moll. N. Y., p. 102. Wheatley, Cat. Shells U. S., p. 27. Reeve, Monog. Anculotus, t. 6, f. 51. Jay, Cat. Shells, 4th Edit., p. 276.
- Leptoxis angulata*, Conrad, Binney, Check List, No. 340.
- Melania Cincinnatiensis*‡, Lea, Philos. Proc. i. p. 66, Dec. 1838. Philos. Trans. viii. p. 190, t. 6, f. 58. Obs. iii. p. 28. Jay, Cat. 4th Edit., p. 273. Catlow, Conch. Nomenc. p. 186.
- Anculotus Cincinnatiensis*, Lea, DeKay, Moll. N. Y., p. 95. Troost, Cat. Shells Tenn.
- Leptoxis Cincinnatiensis*, Lea, Binney, Check List, No. 346.
15. *A. crassa*, Haldeman.  
*Anculosa crassa*, Haldeman, Monog. Limniades, No. 4, p. 3 of Cover, Oct. 5, 1841.  
*Anculotus crassus*, Haldeman, Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Anculotus, t. 2, f. 14.  
*Leptoxis crassa*, Haldeman, Monog. Lept. p. 2, t. 1, f. 19—23. Binney, Check List, No. 350. Brot, List, p. 24.
16. *A. tæniata*, ‡ Conrad,  
*Anculotus tæniatus*, Conrad, New Fresh-Water Shells, p. 63, 1834. DeKay, Moll. N. Y., p. 103. Jay, Cat., 4th Edit., p. 276. Reeve, Monog. Anculotus, t. 6, f. 50, non t. 2, f. 15.  
*Anculosa tæniata*, Conrad, Wheatley, Cat. Shells U. S., p. 28.  
*Leptoxis tæniata*, Conrad, Haldeman, Monog. Leptoxis, t. 3, f. 71—73. Binney, Check List, No. 388. Brot, List, p. 26.  
*Anculosa coosensis*, ‖ Lea, Proc. Acad. Nat. Sci. p. 54, 1861. Jour. Acad. Nat. Sci. v. pt. 3, p. 257, t. 30, f. 65, Mar. 1863. Obs. ix. p. 76.
17. *A. Troostiana*, Lea,  
*Anculosa Troostiana*, Lea, Philos. Proc. ii. p. 34. Philos. Trans. ix. p. 15. Obs. iv. p. 15. Wheatley, Cat. Shells U. S., p. 28.  
*Anculotus Troostianus*, Lea, Reeve, Monog. Anculotus, t. 4, f. 30.  
*Leptoxis Troostiana*, Lea, Haldeman, Monog. Leptoxis, p. 4, t. 3, f. 81. Binney, Check List, No. 391. Brot, List, p. 26.
18. *A. pinguis*, Lea.  
*Melania pinguis*, Philos. Trans. x. p. 301, t. 30, f. 11. Obs. v. p. 57. Binney, Check List, No. 206. Brot, List, p. 40. Reeve, Monog. Melania, sp. 355.

\* The various descriptions by Menke and Deshayes all certainly belong to this species, as Messrs. Haldeman and Anthony long ago decide.

† This is a half grown shell which still retains the angle on the periphery in Alabama, while, in specimens of more northern location, it is only visible in the quite young.

‡ Undoubtedly the quite young shell of *prærosa*.

§ Intermediate in form between *rubiginosa* and *prærosa* and distinguished by its elongated body whorl, concavely flattened around its upper half.

‖ Young shell.

19. *A. pisum*, Haldeman.  
*Leptoxis pisum*, Haldeman, Monog. Lept. p. 4, t. 3, f. 82. Binney, Check List, No. 378. Brot, List, p. 25.
20. *A. contorta*, Lea.  
*Anculosa contorta*, Lea, Proc. Acad. Nat. Sci. p. 187, 1860. Jour. Acad. Nat. Sci. v. pt. 3, p. 258, t. 35, f. 66, Mar. 1863. Obs. ix. p. 80.  
*Leptoxis contorta*, Lea, Binney, Check List, No. 347. Brot, List, p. 24.
21. *A. vittata*, Lea.  
*Anculosa vittata*, Lea, Proc. Acad. Nat. Sci. p. 188, 1860. Jour. Acad. Nat. Sci. v. pt. 3, p. 256, t. 35, f. 63, Mar. 1863. Obs. ix. p. 78.  
*Leptoxis vittata*, Lea, Binney, Check List, No. 397. Brot, List, p. 26.
22. *A. planospira*, Anthony.  
*Melania planospira*, Anthony, Ann. Lyc. Nat. Hist. N. Y., vi. p. 123, t. 3, f. 24, Mar. 1854. Binney, Check List, No. 208. Brot, List, p. 40.  
 Hanley, Conch. Misc. Melania, t. 8, f. 67.  
*Anculotus planospira*, Anthony, Reeve, Monog. Anculotus, t. 2, f. 11.
23. *A. ampla*, Anthony.  
*Anculosa ampla*, Anthony, Ann. N. Y., Lyc. Nat. Hist. vi. p. 159, t. 5, f. 22, 23.  
*Leptoxis ampla*, Anthony, Binney, Check List, No. 339. Brot, List, p. 23.
- Variety a.*
- Anculosa elegans*, Anthony, Proc. Acad. Nat. Sci. p. 69, Feb. 1860.  
*Anculotus elegans*, Anthony, Reeve, Monog. Anculotus, t. 6, f. 49.  
*Leptoxis elegans*, Anthony, Binney, Check List, No. 356. Brot, List, p. 24.
- Variety b.*
- Anculosa formosa*, Lea, Proc. Acad. Nat. Sci. p. 187, 1860. Jour. Acad. Nat. Sci. v. pt. 3, p. 254, Mar. 1863. Obs. ix. p. 76.  
*Leptoxis formosa*, Lea, Binney, Check List, No. 358. Brot, List, p. 24.
24. *A. zebra*,\* Anthony.  
*Anculosa zebra*, Anthony, Proc. Acad. Nat. Sci. p. 69, Feb. 1860.  
*Anculotus zebra*, Anthony, Reeve, Monog. t. 6, f. 52.  
*Leptoxis zebra*, Anthony, Binney, Check List, No. 398. Brot, List, p. 26.
25. *A. picta*, Conrad.  
*Anculosa picta*, Conrad, Am. Jour. Science, 1st Ser., xxx. p. 342, t. 1, f. 15, Jan. 1834. Wheatley, Cat. Shell U. S., p. 28. Hanley, Conch. Misc. Melania, t. 5, f. 39.  
*Anculotus pictus*, Conrad, New Fresh-Water Shells, p. 62, 1834. Reeve, Monog. Anculotus, t. 3, f. 20. Jay, Cat. 4th Edith., p. 276. DeKay, Moll. N. Y., p. 103.  
*Leptoxis picta*, Conrad, Haldeman, Monog. Lept. t. 3, f. 74—80. Binney, Check List, No. 377. Brot, List, p. 25.  
*Anculosa Foremani*, Lea, Philos. Proc. ii. p. 243, Dec. 1842. Philos. Trans. ix. p. 29. Obs. iv. p. 29. Wheatley, Cat. Shells U. S., p. 28.  
*Leptoxis Foremani*, Lea, Binney, Check List, No. 359.  
*Anculosa flammata*, Lea, Philos. Proc. ii. p. 243. Philos. Trans. ix. p. 30. Obs. iv. p. 30.  
*Anculotus flammatus*, Lea, Reeve, Monog. Anculotus, t. 3, f. 18.  
*Leptoxis flammata*, Lea, Binney, Check List, No. 357.

\* Differs in form from *picta*, Con., but so much resembles in coloring the variety *flammata*, described by Mr. Lea, that I doubt whether it is distinct.

26. *A. ornata*, Anthony,  
*Anculosa ornata*, Anthony, Proc. Acad. Nat. Sci. p. 67, Feb. 1860.  
*Anculotus ornatus*, Anthony, Reeve, Monog. Anculotus, t. 3, f. 24.  
*Leptoxis ornata*, Anthony, Binney, Check List, No. 375.
27. *A. Lewisii*, Lea.  
*Anculosa Lewisii*, Lea, Proc. Acad. Nat. Sci. p. 54, 1861. Jour. Acad. Nat. Sci. v. pt. 3, p. 257, t. 35, f. 64, Mar. 1863. Obs. ix. p. 79.
28. *A. squalida*, Lea.  
*Anculosa squalida*, Lea, Philos. Proc. iv. p. 167, Aug. 1845. Philos. Trans. x. p. 66, t. 9, f. 50. Obs. iv. p. 66.  
*Anculotus squalidus*, Lea, Reeve, Monog. Anculotus, t. 3, f. 26?  
*Leptoxis squalida*, Lea, Binney, Check List, No. 386. Brot, List, p. 25.
29. *A. patula*, Anthony.  
*Anculosa patula*, Anthony, Proc. Acad. Nat. Sci. p. 68, Feb. 1860.  
*Anculotus patulus*, Anthony, Reeve, Monog. Anculotus, t. 4, f. 32.  
*Leptoxis patula*, Anthony, Binney, Check List, No. 376. Brot, List, p. 25.
30. *A. viridula*,\* Anthony.  
*Anculosa viridula*, Anthony, Proc. Acad. Nat. Sci. p. 68, Feb. 1860.  
*Anculotus viridulus*, Anthony, Reeve, Monog. Anculotus, t. 4, f. 34.  
*Leptoxis viridula*, Anthony, Binney, Check List, No. 396.
31. *A. humerosa*,? Anthony.  
*Paludina humerosa*, Anthony, Proc. Acad. Nat. Sci. p. 71, 1860.
32. *A. ligata*,† Anthony.  
*Anculosa ligata*, Anthony, Proc. Acad. Nat. Sci. p. 67, Feb. 1860.  
*Anculotus ligatus*, Anthony, Reeve, Monog. Anculotus, t. 3, f. 19.  
*Leptoxis ligata*, Anthony, Binney, Check List, No. 367. Brot, List, p. 24.
33. *A. turbinata*, Lea.  
*Anculosa turbinata*, Lea, Proc. Acad. Nat. Sci. p. 54, 1861. Jour. Acad. Nat. Sci. v. pt. 3, p. 254, Mar. 1863. Obs. ix. p. 76.

*Doubtful and Spurious Species.*

- A. (Paludina) nuclea*, Lea, = *Amnicola*.  
*A. (Paludina) virens*, Lea, = *Amnicola*.  
*A. Spixiana*, Lea, Reeve and Brot, = *Angitrema*.  
*A. incisa*, Lea, Haldeman, Monog., = *Schizostoma*.  
*A. cingenda*, Anthony, MSS., = young of *carinata*, Lea, a variety of *dissimilis*.  
*A. planulata*, Lea, Wheatley, Cat. Shells, p. 28, Alabama, (desc. not published.) = *ampla*, Anth.?  
? *Mel. carinata*, Ravenel, Cat. p. 11, Yadkin River, N. C.  
? *Mel. costata*, Ravenel, Cat. p. 11, Dan River, Va. = *dissimilis*.?  
? *A. subcarinata*, Ravenel, Cat. p. 11, Susquehannah, = *dissimilis*.?  
*A. integra*, Sap, = *Somatogyra*.  
*A. subglobosa*, Say, = *Somatogyra*.  
*A. (Paludina) altilis*, Lea, = *Somatogyra*.  
*Paludina altilis*, Ravenel. = *Somatogyra*.

\* Mr. Reeve thinks this = *Rogersii*, Conr., and Dr. Brot believes it to be *dilatata*, Conr. Although it approaches very closely to *dilatata*, it is a distinct species. It occurs also in North Carolina.  
† Close to *Coosensis*, Lea, (*montana*, Conr.) but is more constricted, has three bands only, and is not maculate. It is stouter and more conical.